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Karp-sik Youn

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EXAMINER

MORRISON, THOMAS A

ART UNIT

PAPER NUMBER

3653

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/606,110	YOUN, KARP-SIK	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thomas A. Morrison	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9,11-15,21-23,25,26,28,29,31,33,35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9,11-13,15,21-23,25,26,28,29,31,33,35 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. The indicated allowability of claims 1, 3-7 and 15 is withdrawn in view of the following rejections. The examiner regrets any inconvenience that may have been caused by this new Office Action.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-5, 15, 21-23, 25-26, 28-29 and 36 are rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 6,382,621 (Inoue et al.).

Regarding claim 1, Figs. 1-5 and 11-12 show an apparatus for preventing paper double feeding in a paper feeding unit of a printer having a frame (Fig. 1), a pickup roller (2) which picks up sheets of paper stacked on a paper cassette (1) and transfers the paper into the printer, and a plurality of paper guides (11 in Figs. 1-2) which are installed at a front portion of the paper cassette (1) and guide the paper transferred by the pickup roller (2), the apparatus comprising:

a stripper (41) which is installed to be inclined at a predetermined angle with respect to the paper stacked on the paper cassette (1), and attached to at least one front side of each of the paper guides (11 in Figs. 1-2)(see also column 10, lines 43-48);

a lever (8) which is installed at a side of the stripper (41) and has a contact surface to contact the paper transferred by the pickup roller (2), and

a lever shaking unit which shakes the lever (8) to intermittently contact a side of the paper transferred by the pickup roller (2), the lever shaking unit comprising

a lever shaft (9) installed on the frame, the lever (8) being connected to the lever shaft (9),

a shaking plate (8a) extending from the lever shaft (9), and

a shaker (10) installed on the frame and intermittently shaking the shaking plate (8a) to shake the lever (8);

wherein a friction force is intermittently applied to the side of the paper by the lever (8), such that double feeding of the paper is prevented and

the stripper (41) comprises an opening groove formed on an upper portion of the stripper (41) such that the contact surface of the lever (8) contacts the side of the paper through the opening groove. See e.g., column 10, lines 43-48. Fig. 2 shows that the guides 11 have openings and column 10, lines 43-48 explain that the stripper (41) is fastened to guides 11. Thus, the stripper 41 is located wherever guides 11 are located including the portions of the guides (11) around the openings in Fig. 2. Thus, all of the limitations of claim 1 are met by Inoue et al.

Regarding claim 3, in the recitation "wherein the lever is shaken **so that the contact surface periodically at least three times contacts the paper while a front end of the paper passes from a lower end of the contact surface to an upper end of the contact surface**", this bolded portion of the recitation has not been given patentable weight in view of MPEP, section 2114. Specifically, MPEP, section 2114 states that, "While features of an apparatus may be recited either structurally or

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functionally, claims <directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function." See MPEP, section 2114. Claim 3 is not distinguished from Inoue et al. in terms of structure.

Regarding claim 4, the stripper (41) is located wherever the guides (11) are located. See e.g., Fig. 2 and column 10, lines 43-48. There are two guides (11) in Fig. 2, so there are two sub-strippers (41) on such guides (11). Moreover, Fig. 2 appears to show two sub-levers.

Regarding claim 5, the friction force intermittently applied to the side of the paper by the lever (8) is inherently larger than a resistance applied to the paper by the stripper (41), so that the paper can be fed past the stripper (41) but moved by the outer surface of the lever (8).

Regarding claim 15, Figs. 1-5 and 11-12 of Inoue et al. show an apparatus for preventing paper double feeding in a paper feeding unit of a printer having a frame (Fig. 1), a pickup roller (2) which picks up sheets of paper stacked on a paper cassette (1) and transfers the paper into the printer, and a plurality of paper guides (11 in Fig. 2) which are installed at a front portion of the paper cassette (1) and guide the paper transferred by the pickup roller (2), the apparatus comprising:

a stripper (41 in Fig. 12) which is installed to be inclined at a predetermined angle with respect to the paper stacked on the paper cassette (1), and attached to at least one front side of each of the paper guides (11 in Figs. 1-2)(see also column 10, lines 43-48);

a lever (8) which is installed at a side of the stripper (41) and has a contact surface to contact the paper transferred by the pickup roller (2),

a lever shaking unit which shakes the lever (8) to intermittently contact a side of the paper transferred by the pickup roller (2); and

a lever shaft (9) which is placed at the side of the stripper and rotatably installed on the frame of the printer, wherein the lever (8) is fixed on the lever shaft (9), and the lever shaking unit shakes the lever shaft (9) so that the lever is shaken. The cam member (10) shakes the lever as well as the lever shaft.

Also, a friction force is intermittently applied to the side of the paper by the lever (8), such that double feeding of the paper is prevented, and the lever shaking unit comprises:

a shaking plate (8a) fixed on the lever shaft (9), and

a shaker (10), which is coupled with the shaking plate (8a) and periodically shakes the shaking plate (8a) so that the lever (8) coupled with the lever shaft (9) is shaken, and

the stripper (41) comprises an opening groove formed on an upper portion of the stripper (41) such that the contact surface of the lever (8) contacts the side of the paper through the opening groove. See e.g., column 10, lines 43-48. Fig. 2 shows that the guides 11 have openings and column 10, lines 43-48 explain that the stripper (41) is fastened to guides 11. Thus, the stripper 41 is located wherever guides 11 are located including the portions of the guides (11) around the openings in Fig. 2. Thus, all of the limitations of claim 15 are met by Inoue et al.

Regarding claim 21, Figs. 1-5 and 11-12 show an apparatus for preventing paper double feeding in a paper feeding unit of a printer having a frame (Fig.1), a pickup roller

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(2) which picks up paper stacked on a paper cassette (1) and transfers the paper into the printer, and a plurality of paper guides (11 in Fig. 2) which are installed at a portion of the paper cassette (1) and guide the paper transferred by the pickup roller (2) in a paper feeding path, the apparatus comprising:

a stripper (41 in Fig. 12) disposed on the paper feeding path, fixedly installed on the frame to be inclined at a predetermined angle with respect to the paper stacked on the paper cassette (1), and contacting the paper transferred by the pickup roller (2) to apply a first paper feeding resistance force to the paper;

a lever shaking unit, comprising

a lever shaft (9) movably installed on the frame,

a plate (8a) extending from the lever shaft (9), and

a shaker (10), selectively contacting the plate (8a) to rotate the lever shaft (9),

and

a lever (8) disposed on the paper feeding path, installed on the shaft (9), and having a contact surface intermittently contacting the paper transferred by the pickup roller (2) to apply a second paper feeding resistance force to the paper,

wherein the stripper (41) comprises another contact surface contacting the paper and an opening formed through the another contact surface, and the contact surface of the lever (8) is disposed in the opening of the another contact surface of the stripper (41). See e.g., column 10, lines 43-48. Fig. 2 shows that the guides 11 have openings and column 10, lines 43-48 explain that the stripper (41) is fastened to guides 11. Thus, the stripper 41 is located wherever guides 11 are located including the portions of the

guides (11) around the openings in Fig. 2. Thus, the stripper has an opening as well.

Thus, all of the limitations of claim 21 are met by Inoue et al.

Regarding claim 22, as best understood, Figs. 4, 11 and 12 show that the paper comprises a first paper (top sheet) and a second paper (below top sheet), and the stripper (41) applies the first paper feeding resistance force to the first paper (top sheet) while the contacting surface of the lever (8) applies the second paper feeding resistance force to the second paper. The position of the stripper is shown in Figs. 11-12 and the timing of operation appears to be shown in Fig. 4.

Regarding claim 23, Figs. 4 and 11-12 show that the lever (8) selectively contacts the paper while the stripper contacts the paper.

Regarding claim 25, Figs. 11-12 show that the lever (8) moves in a direction between a first position (Fig. 11) to allow the contact surface to contact the paper and a second position (Fig. 12) to allow the contact surface to be moved away from the paper passing the stripper.

Regarding claim 26, Figs. 1-2 and 11-12 show that the lever (8) rotates in a direction (up and down) perpendicular to the paper feeding direction.

Regarding claim 28, the contact surface of the lever (8) contacts the paper through the opening in the stripper (41).

Regarding claim 29, Figs. 1-2 and 11-12 show that the paper comprises a first paper (top sheet) and a second paper (below top sheet), the first paper and the second paper generate a friction force between the first paper and the second paper, and the second paper feeding resistance force is equal to or greater than the friction force.



Regarding claim 36, Figs. 1-5 and 11-12 show an apparatus for preventing paper double feeding in a paper feeding unit of a printer having a frame (Fig. 1), a pickup roller (2) which picks up paper stacked on a paper cassette (1) and transfers the paper into the printer, and a plurality of paper guides (11 in Fig. 2) which are installed at a portion of the paper cassette (1) and guide the paper transferred by the pickup roller (2) in a paper feeding path, the apparatus comprising:

a stripper (41 in Fig. 12) fixedly disposed on the paper feeding path to apply a first paper feeding resistance force to the paper fed by the pickup roller (2),

a lever (8) movably disposed on the paper feeding path to selectively apply a second paper feeding resistance force to the paper fed by the pickup roller (2), the lever (8) having a contact surface and being installed on a lever shaft (9) rotatably installed on the frame;

a plate (8a) extending from the lever shaft (9), and

a shaker (10) controlling the lever (8) by intermittently shaking the plate (8a) to move with respect to the paper fed by the pickup roller (2), to intermittently contact the paper,

the stripper (41) comprises an opening groove formed on an upper portion of the stripper (41) such that the contact surface of the lever (8) contacts the side of the paper through the opening groove. See e.g., column 10, lines 43-48. Fig. 2 shows that the guides 11 have openings and column 10, lines 43-48 explain that the stripper (41) is fastened to guides 11. Thus, the stripper 41 is located wherever guides 11 are located

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including the portions of the guides (11) around the openings in Fig. 2. Thus, all of the limitations of claim 36 are met by Inoue et al.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,382,621 (Inoue et al.) as applied to claim 1 above, and further in view of U.S. Patent No. 5,443,251 (Kan et al.). The Inoue et al. patent discloses a lever, but does not specifically show that the lever has a rubber friction pad, as set forth in claims 6 and 7.

Figs. 27-29 of the Kan et al. patent show that it is well known to provide a friction pad (57) made from rubber material on a cam operated lever (57b) to prevent double feeding of sheets. See column 20, lines 51-54. It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the contact surface of Inoue et al. with a friction pad formed of a rubber material, to prevent double feeding of sheets, as taught by Kan et al. See also column 14, lines 5-11 of Kan et al.

4. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,382,621 (Inoue et al.) in view of U.S. Patent No. 5,443,251 (Kan et al.), and further in view of U.S. Patent No. 6,217,017 (Yamazaki).

Regarding claim 9, Figs. 1-5 and 11-12 of Inoue et al. show an apparatus for preventing paper double feeding in a paper feeding unit of a printer having a frame (Fig. 1), a pickup roller (2) which picks up sheets of paper stacked on a paper cassette (1) and transfers the paper into the printer, and a plurality of paper guides (11 in Fig. 2) which are installed at a front portion of the paper cassette (1) and guide the paper transferred by the pickup roller (2), the apparatus comprising:

- a stripper (41 in Fig. 12) which is installed to be inclined at a predetermined angle with respect to the paper stacked on the paper cassette (1), and attached to at least one front side of each of the paper guides (11 in Fig. 2) (see also column 10, lines 43-48);

- a lever (8) which is installed at a side of the stripper (41) and has a contact surface to contact the paper transferred by the pickup roller (2),

- a lever shaking unit which shakes the lever (8) to intermittently contact a side of the paper transferred by the pickup roller (2); and

- a lever shaft (9) which is placed at the side of the stripper (41) and rotatably installed on the frame of the printer, wherein the lever (8) is fixed on the lever shaft (9), and the lever shaking unit shakes the lever shaft (9) so that the lever (8) is shaken. The cam member (10) shakes the lever (8) as well as the shaft (9).

Also, a friction force is intermittently applied to the side of the paper by the lever (8), such that double feeding of the paper is prevented, and the lever shaking unit comprises:

- a shaking plate (8a) fixed on a lever shaft (9),

a cam gear (10) which contacts a first side of the shaking plate (8a), rotates, and periodically shakes the shaking plate (8a) so that the lever (8) coupled with the lever shaft (9) is shaken, and

a driving motor (column 5, lines 16-18) which rotates and drives the cam gear (10).

Also, the stripper (41) comprises an opening groove formed on an upper portion of the stripper (41) such that the contact surface of the lever (8) contacts the side of the paper through the opening groove. See e.g., column 10, lines 43-48. Fig. 2 shows that the guides 11 have openings and column 10, lines 43-48 explain that the stripper (41) is fastened to guides 11. Thus, the stripper 41 is located wherever guides 11 are located including the portions of the guides (11) around the openings in Fig. 2.

While Inoue et al. discloses a driving motor, Inoue et al. does not specifically disclose that such driving motor rotates and drives the cam gear as well as the pickup roller, as claimed. Also, the Inoue et al. patent does not show an elastic member, as claimed.

Figs. 27-29 of the Kan et al. patent show that it is well known to provide an elastic member (215) that biases a lever (57) in a first direction (i.e., biased into contact with a cam). The Kan et al. patent explains that element 57 is always pressed against the cam 213 by a bias spring 215. Accordingly, element 57 can be pivoted by the cam against the bias force of the spring. It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the lever (8) of Inoue et al. with an elastic member to bias the lever (8) toward the cam (10) of Inoue and ensure that the

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lever follows the cam surface of the cam, as shown in Kan et al. See also column 20, lines 11-17 of Kan et al.

Inoue et al., as modified by Kan et al. meets all of the limitations of claim 9, except that the driving motor does not rotate and drive the cam gear (10), as well as the pickup roller (2), as claimed.

Figs. 1 and 8-10 of the Yamazaki patent disclose that it is well known to use the same motor (30) to drive a pickup roller (20) and a cam gear (including 33) that operates a lever (28). See e.g., Figs. 1, 8-10 and column 4, line 48-62. Such use of a single motor reduces the number of parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a single motor to drive the pickup roller and the cam gear in order to reduce the number of parts, as shown in Yamazaki. Thus, all of the limitations of claim 9 are met.

Regarding claim 13, the cam gear (10) of Inoue et al. comprises a cam surface; and the lever shaking unit comprises at least one cam protrusion formed on the cam surface that contacts the shaking plate (8a).

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,382,621 (Inoue et al.)(hereinafter "Inoue '621") in view of Kan et al. and Yamazaki as applied to claim 9 above, and further in view of U.S. Patent No. 6,000,689 (Furuki et al.)(hereinafter "Furuki '689"). The Inoue '621, Kan et al. and Yamazaki patents disclose the claimed invention except for a compression coil spring.

Fig. 3 of Furuki '689 shows that it is well known to use a compression coil spring (11) to bias a lever (7) in the direction of a cam member (8). These two elements were

art recognized equivalents at the time of the invention in those lever moving applications where it is immaterial whether a compression coil spring or a tension spring is used for biasing a lever. Therefore, one of ordinary skill would have found it obvious to substitute a compression coil spring for the tension spring of Kan et al to facilitate biasing of the lever as suggested by Fig. 3 of Furuki '689. One of ordinary skill in the art would have been motivated to use a compression coil spring rather than a tension spring to simplify assembly, by eliminating the step of connecting a small end portion of the tension spring into a small hole in a lever portion, as shown in Fig. 28A of Kan et al.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. in view of Kan et al. and Yamazaki as applied to claim 9 above, and further in view of U.S. Patent No. 5,485,991 (Hirano et al.). Inoue et al. in view of Kan et al. and Yamazaki meets the limitations of the claim except that it employs a tension spring rather than a leaf spring in order to hold the shaking plate against the cam. Fig. 20 of the Hirano et al. patent discloses that it is well known to bias a movable member (13) into contact with a cam (10) using a leaf spring (12). More specifically, the Hirano patent shows that these two elements were art recognized equivalents at the time of the invention in those shaking applications where it is immaterial whether a leaf spring or a tension spring is used for holding a shaking plate against a cam. Therefore, one of ordinary skill would have found it obvious to substitute a leaf spring for the tension spring of Kan et al. to facilitate holding of the shaking plate against the cam as suggested by Fig. 20 of the Hirano et al. patent. One of ordinary skill in the art would have been motivated to use a leaf spring rather than a tension spring to simplify

assembly, by eliminating the step of connecting a small end portion of the tension spring into a small hole in a lever portion, as shown in Fig. 28A of Kan et al.

7. Claim 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,382,621 (Inoue et al.) as applied to claim 21 above, and further in view of U.S. Patent No. 5,443,251 (Kan et al.). The Inoue et al. patent discloses all of the elements of claims 31 and 33, except for the resilient member, as claimed. Figs. 27-29 of the Kan et al. patent show that it is well known to provide a resilient member (215) that biases a lever (57) in a first direction (i.e., biased into contact with a cam). The Kan et al. patent explains that element 57 is always pressed against the cam 213 by a bias spring 215. Accordingly, element 57 can be pivoted by the cam against the bias force of the spring. It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the lever (8) of Inoue et al. with a resilient member to bias the lever (8) toward the cam (10) of Inoue and ensure that the lever follows the cam surface of the cam, as shown in Kan et al. See also column 20, lines 11-17 of Kan et al.

Regarding claim 33, the shaft (9) of Inoue et al. is parallel to a width direction of the paper perpendicular to the paper feeding direction.

8. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,382,621 (Inoue et al.) in view of U.S. Patent No. 6,217,017 (Yamazaki). Regarding claim 35, Figs. 1-5 and 11-12 of Inoue et al. show an apparatus for preventing paper double feeding in a paper feeding unit of a printer having a frame (Fig. 1), a pickup roller (2) which picks up paper stacked on a paper cassette (1) and

transfers the paper into the printer, and a plurality of paper guides (11 in Fig. 2) which are installed at a portion of the paper cassette (1) and guide the paper transferred by the pickup roller (2) in a paper feeding path, the apparatus comprising:

a stripper (41 in Fig. 12) disposed on the paper feeding path, fixedly installed on the frame to be inclined at a predetermined angle with respect to the paper stacked on the paper cassette (1), and contacting the paper transferred by the pickup roller (2) to apply a first paper feeding resistance force to the paper;

a lever (8) disposed on the paper feeding path, movably installed on the frame, and having a contact surface contacting the paper transferred by the pickup roller (2) to apply a second paper feeding resistance force to the paper.

Moreover, the Inoue et al. patent discloses that the stripper (41) comprises an opening groove formed on an upper portion of the stripper (41) such that the contact surface of the lever (8) contacts the side of the paper through the opening groove. See e.g., column 10, lines 43-48. Fig. 2 shows that the guides 11 have openings and column 10, lines 43-48 explain that the stripper (41) is fastened to guides 11. Thus, the stripper 41 is located wherever guides 11 are located including the portions of the guides (11) around the openings in Fig. 2.

In addition, the Inoue et al. patent discloses a motor (column 5, lines 16-18), but does not specifically disclose that such motor rotates the pickup roller (2) and moves the lever (8) with respect to the stripper (41).

Figs. 1 and 8-10 of the Yamazaki patent disclose that it is well known to use the same motor (30) to drive a pickup roller (20) and a cam gear (including 33) that



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operates a lever (28). See e.g., Figs. 1, 8-10 and column 4, line 48-62. Such use of a single motor reduces the number of parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a single motor to drive the pickup roller and the cam gear in order to reduce the number of parts, as shown in Yamazaki. Thus, all of the limitations of claim 35 are met.

### ***Response to Arguments***

9. Applicants arguments with respect to claims 21-23, 25, 26, 28, 29, 31, 33 and 36 have been fully considered, but are moot in view of the new grounds of rejection.

### ***Allowable Subject Matter***

10. Claim 14 is allowed.

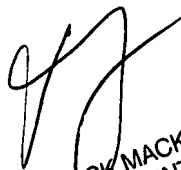
### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

08/05/2007



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